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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,218	06/30/2005	Satoshi Matsuura	2005-0981A	5809
513 7590 08/23/2007 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			EXAMINER KEATON, SHERROD L	
			ART UNIT 2174	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/541,218	Applicant(s) MATSUURA ET AL.	
	Examiner sherrod keaton	Art Unit 2174	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9-15-2005, 6-30-2005</u> .                                    | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

This action is in response to the original filing of June 10, 2005. Claims 1-27 are pending and has been considered below:

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 19-21 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila (6721542 B1) in view of Arcuri (6232972 B1).

**Claims 1, 19 and 27:** Anttila discloses an application program prediction method, terminal and program by which a mobile terminal installed with two or more application programs predicts an application program that a user is likely to use, said method comprising:

an application executing step of selecting and executing one of the application programs (Column 7, Lines 7-17);

a location detecting step of detecting a location where the mobile terminal exists when the application program is executed in said application executing step (Column 7, Lines 7-17);

But does not disclose a usage history creating step of creating a usage history of the application program executed in said application executing step, in association with the location detected in said location detecting step; a predicting step of specifying, based on the usage history, an application program corresponding to a predetermined location and presenting the specified application program as a prediction result. However Arcuri discloses a method for dynamically displaying controls in a toolbar and further discloses displaying controls based on usage (Column 4, Lines 48-58; Column 9, Lines 15-41).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have usage history also decide possible application prediction in Anttila as taught by Arcuri. One would have been motivated to have the dual prediction method to help quickly facilitate choices and save navigation time.

**Claims 2 and 20:** Anttila and Arcuri disclose an application program prediction method as in claim 1 above, and Anttila further disclose wherein said predicting step includes: a current location detecting step of detecting a current location of the mobile terminal (Column 4, Lines 7-15), an application program corresponding to the current location detected in said current location detecting step; and a presenting step of presenting the

application program specified in said specifying step, as a prediction result of an application program that the user is likely to use currently (Column 7, Lines 7-17).

Arcuri discloses a specifying step of specifying, based on the usage history (Column 4, Lines 48-58; Column 9, Lines 15-41).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have usage history also decide possible application prediction in the modified Anttila as taught by Arcuri. One would have been motivated to have the dual prediction method to help facilitate choices and save navigation time.

**Claims 3 and 21:** Anttila and Arcuri disclose an application program prediction method as in claim 2 above, and further disclose said specifying step, a content corresponding to the current location detected in said current location detecting step is further specified based on the usage history, and in said presenting step, the content specified in said specifying step is further presented as a content of the application program that the user is likely to use currently.

Arcuri discloses wherein in said usage history creating step, the usage history is created, the usage history including a name of the application program executed in said application executing step and a content for the application program inputted by a user's operation (Column 3, Lines 20-30) the system looks at the application last used to determine controls. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have usage history also include name of

application in modified Anittila as taught by Arcuri. One would have been motivated to have the name of the application to provide detailed identification of the application providing efficient system navigation.

**Claims 18 and 26:** Anttila and Arcuri disclose an application program prediction method as in claims 1 and 19 above, and further disclose: a mode setting step of setting an operation mode of the mobile terminal; a setting location detecting step of detecting a location of the mobile terminal where the operation mode is set in said mode setting step (Column 7, Lines 7-17); a setting history creating step of creating a setting history of the operation mode set in said mode setting step, in association with the location detected in said setting location detecting step; and a mode predicting step of specifying an operation mode corresponding to a current location of the mobile terminal based on the setting history, and presenting the set operation mode as a prediction result (Column 4, Lines 48-58; Column 9, Lines 15-41). Anytime that the system has the capability of performing an action it is in the mode.

3. Claims 4-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila (6721542 B1) in view of Arcuri (6232972 B1), as applied to claim 3 above, and further in view of Gong (20030163311 A1).

**Claim 4:** Anttila and Arcuri disclose an application program prediction method as in claim 3 above, but does not explicitly disclose a specifying step, when an e-mail is

specified as an application program corresponding to the current location detected in said current location detecting step, and in said presenting step, a prediction result is presented, the prediction result indicating that the e-mail is specified as the application program that the user is likely to use currently. However Gong discloses an intelligent social agent and further discloses the launch of an email for a user (Page 4, Paragraph 37). Anttila discloses starting up possible applications. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include email as a predicted application in the modified Anttila as taught by Gong. One would have been motivated to launch email to provide important everyday applications that the user may find useful.

**Claim 5:** Anttila, Arcuri and Gong disclose an application program prediction method as in claim 4, and Gong further discloses wherein in said specifying step, a destination of the e-mail is specified as a content corresponding to the current location detected in said current location detecting step, and in said presenting step, the destination is presented (Page 2, Paragraph 26). The system looks at all aspects of the email so when starting the program. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include a destination of the email in the modified Anttila as taught by Gong. One would have been motivated to include a destination to quicken the emailing process thereby improving efficiency of the user.

**Claim 6:** Anttila, Arcuri and Gong disclose an application program prediction method as in claim 5, and Gong further discloses wherein in said specifying step, a template of a text of the e-mail is specified as a content corresponding to the current location detected in said current location detecting step, and in said presenting step, the template is presented (Page 2, Paragraph 26). The system looks at all aspects of the email so when starting the program. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include a template of the email in the modified Anttila as taught by Gong. One would have been motivated to include a template to quicken the email configuration thereby improving efficiency of the user when using that application.

4. Claims 7, 16, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila (6721542 B1) and Arcuri (6232972 B1) as applied to claims 1, 7 and 22 above, and further in view of Pearce (5754125).

**Claims 7 and 22:** Anttila and Arcuri disclose an application program prediction method as in claim 1 above, and disclose a specifying step of specifying, based on the usage history (Arcuri: Column 4, Lines 48-58; Column 9, Lines 15-41) but do not explicitly disclose wherein said predicting step includes: a future location predicting step of predicting a future location of the mobile terminal; an application program corresponding to the future location predicted in said future location predicting step; and a presenting



step of presenting the application program specified in said specifying step, as a prediction result of an application program that the user is likely to use in the future.

However Pearce discloses an automatic vehicle system and further discloses predictive location (Column 2, Lines 1-7). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have a future location predictor in the modified Anttila as taught by Pearce. One would have been motivated to provide future location to improve users ability to quickly interact with location specific applications.

**Claims 16 and 24:** Anttila, Arcuri and Pearce disclose an application program prediction method as in claims 7 and 22 above, wherein said future location predicting step includes: a station specifying step of specifying a station where the mobile terminal currently exists, through communication carried out between the mobile terminal and a device placed in the station; and a retrieving step of retrieving, from a past route search result, an arrival station corresponding to a departure station that is the station specified in said station specifying step, and the arrival station retrieved in said retrieving step is regarded as the future location of the mobile terminal. Pearce further discloses a unit using a location system looking at when the position and velocity were generated and predicting a position based on the movements (Page 3, Lines 1-30). Therefore it would have been obvious to having ordinary skill in the art at the time of the invention to check base location and predict an arrival area in the modified Anttila as taught by Pearce. One would have been motivated to use the base location to provide a definite location

parameter when calculating prediction results this allows the system to produce more accurate results.

5. Claims 8, 9, 14, 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila (6721542 B1), Arcuri (6232972 B1) and Pearce (5754125) as applied to claim 7 above, and further in view of Horvitz (20030014491 A1).

**Claims 8 and 23:** Anttila, Arcuri and Pearce disclose an application program prediction method as in claim 7 above, but do not explicitly disclose comprising a movement history creating step of creating a movement history of the mobile terminal in association with a calendar attribute, wherein in said future location predicting step, a location corresponding to a calendar attribute indicating a time later than a current time is specified based on the movement history, and the specified location is regarded as a future location of the mobile terminal. However Horvitz discloses a method and application of learning and inferring the periods of time and further discloses a calendar system, which takes notes and tries to forecast location and available time openings with accordance with the calendar (Page 3, Paragraph 33). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide calendar forecast in the modified Anttila as taught by Horvitz. One would have been

motivated to provide the calendar forecast in order relate functions with predetermined events improving the prediction calculation.

**Claim 9:** Anttila, Arcuri, Pearce and Horvitz disclose an application program prediction method as in claim 8 above, wherein discloses the said usage history creating step, the usage history is created, the usage history including a name of the application program executed in said application executing step and a content for the application program inputted by a user's operation (Arcuri: Column 3, Lines 20-30), and discloses the said specifying step, a content corresponding to the future location predicted in said future location predicting step is further specified based on the usage history, and in said presenting step, the content specified in said specifying step is further presented as a content of the application program that the user is likely to use in the future (Pearce: Column 2, Lines 1-7).

**Claim 14:** Anttila, Arcuri, Pearce, Horvitz disclose an application program prediction method as in claim 8, wherein in said future location predicting step, a location at which the mobile terminal existed with the most frequency is specified based on the movement history, from among locations associated with the calendar attributes indicating the times later than the current time. Pearce also discloses the prediction based speed and direction movement (Page 2, Lines 1-7) and Horvitz discloses a using GPS in reference to time of day or a day of the week (Page 8, Paragraph 71). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use movement history and calendar attributes for predicting location in the modified Anttila

to time of day or a day of the week (Page 8, Paragraph 71). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use movement history and calendar attributes for predicting location in the modified Anttila as taught by Pearce and Horvitz. One would have been motivated to use the movement history and calendar to provide better system efficiency for making a prediction.

**Claim 15:** Anttila, Arcuri, Pearce, Horvitz disclose an application program prediction method as in claim 8, wherein in said future location predicting step, a location to which the mobile terminal moved next with the most frequency, starting from the current location and the current time indicated by a current calendar attribute, is specified based on the movement history. Pearce also discloses the prediction based speed and direction movement and looks at possible other locations if the predicted location passes the predetermined limit (Page 2, Lines 1-20) and Horvitz discloses a using GPS in reference to time of day or a day of the week (Page 8, Paragraph 71). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use movement history to provide other locations and calendar attributes for predicting location in the modified Anttila as taught by Pearce and Horvitz. One would have been motivated to use the movement history and the calendar to provide better system efficiency when making or redefining a prediction.

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6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila (6721542 B1), Arcuri (6232972 B1), Pearce (5754125) and Horvitz (20030014491 A1) as applied to claim 9 above, and further in view of Duley (5459671).

**Claim 10:** Anttila, Arcuri, Pearce and Horvitz disclose an application program prediction method as in claim 9 above however do not explicitly disclose a power detecting step of detecting a remaining amount of power of the mobile terminal; a calculating step of calculating an amount of power which is to be consumed when the application program and the content specified in said specifying step are used; and a message presenting step of presenting a message prompting to charge when the remaining amount of power detected in said power detecting step is smaller than the amount of power consumption calculated in said calculating step. However Duley discloses a programmable battery controller and further discloses power monitoring and display of warning messages (Column 4, Lines 9-21; Column 5, Lines 39-50). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include power monitoring and alert messages in the modified Anttila as taught by Duley. One would have been motivated to have power management functions to improve user operability of the system and not have terminal stop working in the middle of an application.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila (6721542 B1), Arcuri (6232972 B1), Pearce (5754125), Horvitz (20030014491 A1) and Duley (5459671) as applied to claim 10 above, and further in view of Salmimaa et al (20020160817).

**Claim 11:** Anttila, Arcuri, Pearce, Horvitz and Duley disclose an application program prediction method as in claim 10 above but do not explicitly disclose: a sending step of sending current location information indicating a current location of the mobile terminal to a predetermined apparatus via a communication network; an obtaining step of obtaining, from the predetermined apparatus, charging place information indicating a place where the mobile terminal can be charged, in the vicinity of the location indicated in the current location information; and a charging place presenting step of presenting the charging place based on the charging place information obtained in said obtaining step. However Salmimaa discloses a method and apparatus for displaying prioritized icons in a mobile display and further discloses displaying places of importance (e.g. gas stations or charging station) in reference to a geographical region (Page 1, Paragraph 9; Page 4, Paragraph 44). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to inform the user of possible places of interest such as charging location in the modified Anttila as taught by Salmimaa. One would have been motivated to have this location information to tailor to the terminals specific needs for charging arrangements.

8. Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila (6721542 B1), Arcuri (6232972 B1), Pearce (5754125) and Horvitz (20030014491 A1) as applied to claim 9 above, and further in view of Cantos (6529784 B1).

**Claim 12:** Anttila, Arcuri, Pearce and Horvitz disclose an application program prediction method as in claim 9 above however do not explicitly disclose wherein the content is distribution data to be distributed via a communication network, and said application program prediction method further comprises: a judging step of judging whether or not the mobile terminal holds a latest version of the distribution data specified in said specifying step; and a presenting step of presenting a message for notifying that the mobile terminal does not hold the latest version of the distribution data, when it is judged in said judging step that the mobile terminal does not hold the latest version. However Cantos discloses a system for monitoring computer systems and further discloses a system determining if a new package is available to the system and sending message that a package is available (Column 6, Lines 13-25). Therefore it would have been obvious to one having ordinary in the art at the time of the invention to have alerts for possible upgrades of the system in the modified Anttila as taught by Cantos. One would have been motivated to have the alerts because they are a quick and efficient way to notify the user of needed system changes.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila (6721542 B1), Arcuri (6232972 B1), Pearce (5754125), Horvitz (20030014491 A1) and

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Cantos (6529784 B1) as applied to claim 12 above, and further in view of Salmimaa et al (20020160817).

**Claim 13:** Anttila, Arcuri, Pearce, Horvitz and Cantos disclose an application program prediction method according to claim 12, further comprising: a sending step of sending current location information indicating a current location of the mobile terminal to a predetermined apparatus via a communication network; an obtaining step of obtaining, from the predetermined apparatus, obtainment place information indicating a data obtainment place where the mobile terminal can obtain the latest version of the distribution data, in the vicinity of the location indicated in the current location information; and an obtainment place presenting step of presenting the data obtainment place based on the obtainment place information obtained in said obtaining step.

However Salmimaa discloses a method and apparatus for displaying prioritized icons in a mobile display and further discloses displaying places of importance (e.g. Help Areas or Product sales stores) in reference to a geographical region (Page 1, Paragraph 9; Page 4, Paragraph 44). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to inform user of possible places of interest such as store or area to get an update in the modified Anttila as taught by Salmimaa. One would have been motivated to have this location information to tailor to the terminals specific need to update the software of the device.



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10. Claims 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anttila (6721542 B1), Arcuri (6232972 B1) and Pearce (5754125) as applied to claims 7 and 22 above, and further in view of Gong (20030163311 A1).

**Claims 17 and 25:** Anttila, Arcuri and Pearce disclose an application program prediction method as in claims 7 and 22 above, but do not explicitly disclose wherein said future location predicting step includes: a route specifying step of specifying a route on which the station where the mobile terminal currently exists is located, through communication carried out between the mobile terminal and a device placed in the station; and a retrieving step of retrieving, from a past e-mail history, a station which is located on the route specified in said station specifying step, and the station retrieved in said retrieving step is regarded as the future location of the mobile terminal. However Gong discloses an intelligent social agent extracts information about the user from context, which includes email to determine possible location (Page 2, Paragraph 26; Page 3, Paragraph 29). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use email history in helping predict location in the modified Anttila as taught by Gong. One would have been motivated to use email history to provide a definite location parameter when calculating prediction results this allows the system to produce more accurate results.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrod Keaton whose telephone number is 571) 270-1697. The examiner can normally be reached on Mon. thru Fri. and alternating Fri. off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KRISTINE KINCAID can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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